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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,895	08/07/2001	Sanil Kumar Puthiyandyil	01-592	2243

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EXAMINER

SALAD, ABDULLAHI ELMI

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,895

Applicant(s)

PUTHIYANDYIL ET AL.

Examiner

Salad E. Abdullahi

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. The Amendment filed on 4/3/2006 has been received and made of record.
1. Applicant's arguments with respect to claims 1-17 and 19-24 have been fully considered but are moot in view of new grounds of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5-6 and 9-17 and 21-24 are rejected under 35 U.S.C. 103(a) as being obvious over Sitaraman U.S. Patent No. 7,023,879 [hereinafter Sitaraman] in view of Skene et al., U.S. Patent Application Publication No. 20010047415 [hereinafter Skene].

As per claim 1 and 6, Sitaraman discloses system for load balancing, the system comprising:

an L2TP access Concentrator (LAC), LAC the LAC including a contact L2TP network Server (LNS) address (see fig. 1 and col. 1, line 62 to col. 2, line 32);

a contact LNS communicatively coupled to the LAC (see fig. 1 and col. 1, line 62 to col. 2, line 32);

a plurality of load balancing LNS communicatively coupled to the contact LNS and to the LAC (see col. 10, lines 23-35);

wherein the contact LNS address specifies the address of the contact LNS (see col. 2, lines 13-25);

Art Unit: 2157

wherein the LAC sends a message to the contact LNS, the message informing the LNS of the availability of the LAC for participating in load balancing (see fig. 1 and col. 1, line 62 to col. 2, line 32);

wherein the contact LNS determines whether the contact LNS can handle a session between the contact LNS and the LAC (See fig. 18 and col. 30, lines 30-45 and col. 10, lines 6-35);

Wherein if the contact LNS determines the contact LNS can handle the session the contact LNS establishes session with LAC (see fig. 18 and col. 11, lines 15-49); and wherein if the contact LNS determines the contact LNS cannot handle the session(see fig. 18 and col. 11, lines 15-49).

Sitaraman is silent regarding:

the contact LNS sends a response message containing IP address of a selected one of the plurality of load balancing LNSs to which the LAC should establish a session.

Skene discloses a communications mechanism where the contact LNS sends a response message containing IP address of a selected one of the plurality of load balancing LNSs to which the LAC should establish a session (see fig. 1 and see paragraph 0027-0029, 0035 and 0073). Therefore, it would have been obvious to one having ordinary skill in the art at the time of then invention presented with the teaching of Sitaraman to utilize the load balancing mechanism as taught by Skene in order to minimize delay related establishing session between the LNSs and the LAC.

Art Unit: 2157

As per claim 2, and 9 Skene discloses the system of claim 1 wherein the contact LNS is included within a virtual LNS (see paragraph 0035).

As per claim 3, and 7, Sitaraman discloses the system of claim 1 wherein the message informing the contact LNS of the availability of the LAC for participating in load balancing is an message (see page 4, lines 11-20).

As per claim 5, Sitaraman discloses the system of claim 1 further including a customer premise equipment (CPE) coupled to the LAC (see fig. 1)

As per claim 9, Skene discloses the method of claim 7 wherein the contact LNS is included in virtual LNS (see col. 3, lines 4-11).

As per claim 21. Sitaraman discloses the system of claim 1, wherein the contact LNS includes a list of LNS available to provide LNS functions if the contact LNS determines LNS cannot handle a session with the LAC (see fig. 18 and col. 11, lines 15-49);

As per claim 22. Sitaraman discloses system of claim 1, wherein each of the plurality of load balancing LNSS transmits heartbeat signals (message) to the contact LNS so that the contact LNS can determine availability of the LNS's of the plurality of load balancing LNSS. (see fig. 1 and col. 1, line 62 to col. 2, line 32).

As per claims 23-24, Sitaraman discloses the method of claim 10, wherein if the contact LNS can provide the session then after establishing the session between the contact

Art Unit: 2157

LNS and LAC, the method further the, comprising sending user data between (i) the LAC and the contact LNS, and (ii) each LAC a customer premises equipment (CPE), and wherein if the contact LNS can not provide the session then after establishing the session between the next LNS and the LAC, the method further comprising sending user data been (i) the LAC and the next LNS, and (ii) the LAC and the CPE (see fig. 18 and col. 11, lines 15-49);

4. Claims 3-4, 7-8, and 19-20 are rejected under 35 U.S.C. 103(a) as being obvious over Sitaraman and Skene and further in view of Applicant Admitted prior Art (APA) As per claims 3-4, 7-8, and 19-20, Sitaraman and Skene discloses substantial features of the claimed invention as discussed above with respect to claim 1, Sitaraman and Skene are silent regarding: wherein the response message is an ICRP message.

APA discloses a load balancing system, wherein the response message is an ICRP message (see page 4, lines 11-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time of then invention presented with the teaching Sitaraman and Skene to utilize control messages such is an ICRP message as taught by APA, in order to ensure the request was successful.

As per claims 10-17, the claims include features analogous to features to features in claims 1-10 discussed above, thus claims 10-17 are rejected same rational as claims 1-10.

Art Unit: 2157

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salad E. Abdullahi whose telephone number is 571-272-4009. The examiner can normally be reached on 8:30 - 5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The **fax phone number** for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2157

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abdullahi Salad

6/26/2006


ABDULLAHI SALAD
PRIMARY EXAMINER